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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,418	07/18/2003	Patrice Onno	01807.002407.	2799

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EXAMINER	
YALEW, FIKREMARIAM A	
ART UNIT	PAPER NUMBER
2436	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/621,418	ONNO ET AL.	
	Examiner	Art Unit	
	Fikremariam Yalew	2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-21 and 23-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-21 and 23-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The office action is in replay to an amendment filed on 06/29/2008. Claim 36 is new added. Claims 1,10,18,27 have been amended. Claims 5 and 22 were previously canceled. Claims 1-4,6-21, and 23-36 are pending.

Priority

2. Acknowledgment is made of Applicant claim for foreign priority under 35 U.S.C 119(a)-(d).The certified copy has been filed in parent French Patent application filed on 07/18/2002 are acknowledged by the examiner.

Response to Arguments

3. Applicant's arguments filed on 06/29/2008 have been fully considered but they are not persuasive.

Regarding to claims 30-33: the applicant argues that the combination of Kayama and Wee do not disclose "encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered". The examiner disagree and points out the combination of Kayama and Wee disclose encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered (See Fig 4 steps 301,401-402 and 0022(i.e., encoder, frequency band separator, each signals have a specific frequency band)).

The applicant argues that the combination of Kayama and Wee do not disclose "modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered". The

examiner disagree and points out that the combination of Kayama and Wee disclose modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered (See col 16 line 56 through col 17 line 19 and Fig 20, Fig 18B(i.e. header data portion includes information that is used by transcoder to transcode the scalable encoded progressively encrypted video data portion& decrypted packet header)).

The applicant also argues the combination of Kayama and Wee do not disclose "modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal". The examiner disagree and points out that the combination of Kayama and Wee disclose wherein the modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal(See Wee col 16 line 56 through col 17 line 19 and Fig 20).

4. Applicant's arguments with respect to claim 1-4,6-21, and 23-29,34-36 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-4,6-21,23-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al (hereinafter referred as Katayama) US Pub No**

20020027994 in view of Wee(hereinafter referred as Wee) US 7,184,548 B2 and further in view of Yoshida(US patent No 4685098).

7. As per claim 1,18,28,34: Katayama teaches a method/apparatus/computer program/device of a digital signal comprising the steps of: decomposing the signal into several regions each containing digital data (0022(i.e., separating the audio signal)); encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered (See 0022 (i.e. each signal have specific frequency band) and Fig 4a steps 401,402);

Katayma does not explicitly teach modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered.

However Wee teaches modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayam to include modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered and modifying step includes making use of at least one transformation key Ku. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

The combination of Katayama and Wee do not explicitly teach modifying resulting in an erroneous value for the amplitude of the data upon decoding.

However Yoshida teaches modifying resulting in an erroneous value for the amplitude of the data upon decoding (See col 4 lines 5-10 and col 4 lines 49-57).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Yoshida within Katayam and Wee method to include modifying resulting in an erroneous value for the amplitude of the data upon decoding.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

8. As claim 2,19: the combination of Katayma-Wee-Yoshida teach a method wherein the digital data of the signal are digital samples representing physical quantities, and (See Wee col 5 lines 54-67), the part of the header data representing the amplitude of the samples of the region considered provides a number of bitplanes according to which the amplitudes of the samples are encoded based on the difference between (1)a number of so-called reference bitplanes, depending on the signal and which is deduced from information present in the signal and(2)a number of zero bitplanes which is contained in said part of the header data(See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

9. As per claim 3,20: the combination of Katayma-Wee-Yoshida teach a method wherein said modifying step includes providing for modifying the number of zero

bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61)

10. As per claim 4, 21: the combination of Katayma-Wee-Yoshida teach a method wherein said modifying step includes providing for increasing the number of zero bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

11. As per claim 6,15,23: the combination of Katayma-Wee-Yoshida teach a method wherein the transformation key Ku depends on the at least one region considered. (See Katayma 0047-0048,0118 and Fig 5 step 503).

12. As per claim 7,16,24: the combination of Katayma-Wee-Yoshida teach a method wherein said modifying step involves in particular the generation of a pseudo-random sequence based on the transformation key Ku (See Katayma 0047-0048,0118 and Fig 5 step 503).

13. As per claim 8,17,25: the combination of Katayma-Wee-Yoshida teach a method wherein it comprises a step of transmitting the transformation key Ku (See Katayma 0047-0048,0118 and Fig 5 step 503).

14. As per claim 9: the combination of Katayma-Wee-Yoshida teach a method wherein it comprises a step of transmitting the signal so transformed (See Katayma 0047-0048,0118 and Fig 5 step 503).

15. As per claims 10,27,29,35: Katayma teaches a method/device/computer program of descrambling a digital signal decomposed into a plurality of regions each containing digital data, the signal being encoded in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the

region considered, the method comprising the steps of: receiving the signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of said signal(See 0022).

Katayma does not explicitly teach modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal.

However Wee teaches modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayam to include modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

The combination of Katayama and Wee do not explicitly teach modifying resulting in an erroneous value for the amplitude of the data upon decoding.

However Yoshida teaches modifying resulting in an erroneous value for the amplitude of the data upon decoding (See col 4 lines 5-10 and col 4 lines 49-57).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Yoshida within Katayam and Wee method to include modifying resulting in an erroneous value for the amplitude of the data upon decoding.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

16. As per claim 11: the combination of Katayma-Wee-Yoshida teach a method wherein the digital data of the signal being digital samples representing physical quantities, (See Wee col 5 lines 54-67) and the part of the header data representing the amplitude of the samples of the region considered provides a modified number of bitplanes according to which the amplitudes of the samples are encoded based on the difference between (1) a number of reference bitplanes, depending on the signal and which is deduced from information present in the signal and,(2)a modified number of zero bitplanes which is contained in the part of the header data(See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

17. As per claim 12: the combination of Katayma-Wee-Yoshida teach a method wherein said step of reverse modifying provides for modifying the modified number of zero bitplanes(See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

18. As per claim 13: the combination of Katayma-Wee-Yoshida teach a method wherein said step of reverse modifying provides for reducing the modified number of zero bitplanes (See Wee col 16 line 56 through col 17 line 19 and col 7 lines 31-47,col 8 lines 39-61).

19. As per claim 14: the combination Katayma-Wee-Yoshida teach a method wherein said modifying step includes making use of at least one transformation key Ku (See Katayma 0047-0048,0118 and Fig 5 step 503)

20. As per claim 26: the combination of Katayma-Wee-Yoshida teach a device further comprising means for transmitting the signal so scrambled. (See Katayma 0047-0048,0118 and Fig 5 step 503)

21. As per claim 36: the combination of Katayma-wee-Yoshida teach a method wherein said modifying step includes making use of at least one transformation key Ku(See Wee 0047-0048,0118 and Fig 5 step 503)

22. **Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al (hereinafter referred as Katayama) US Pub No 20020027994 in view of Wee(hereinafter referred as Wee) US 7,184,548 B2**

23. As per claim 30,32: Katayam teaches an information storage/a partially or totally removable information storage means which is readable by a computer or a mircroprocessor containing code instructions of a computer program for executing the steps of a method of scrambling a digital signal, the method comprising the steps of comprising the steps of: decomposing the signal into several regions each containing digital data (0022(i.e., separating the audio signal)); encoding the signal in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered (See 0022 (i.e. each signal have specific frequency band) and Fig 4a steps 401,402);

Katayma does not explicitly teach modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered.

However Wee teaches modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayam to include modifying among the header data specific to at least one region of the signal, the part of the header data representing the amplitude of the data of the region considered and modifying step includes making use of at least one transformation key Ku. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

24. As per claims 31,33: Katayma teaches a partially or totally removable information storage/an information storage means which is readable by a computer or a microprocessor containing code instructions of a computer program for executing the steps of a method of descrambling a digital signal decomposed into a plurality of regions each containing digital data, the signal being encoded in a format comprising header data specific to each region and which comprise at least one part representing the amplitude of the data of the region considered, the method comprising the steps of: receiving the signal of which the part of the header data representing the amplitude of the data of at least one region has undergone a modification before transmission of said signal(See 0022).

Katayma does not explicitly teach modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal.

However Wee teaches modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. (See col 16 line 56 through col 17 line 19 and Fig 20).

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teaching method of Katayam to include modifying in reverse that modified part of the header data in order to restore said unmodified part of the header data of the signal. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, (See Wee col 3 lines 42-44) inorder to provide secure and scalable encoding method for use in streaming of data.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 5712738300. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4195.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fikremariam Yalew
10/11/2008
FA

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